

In the Claims:

1. (Currently Amended) Apparatus for measuring blood pressure, comprising a generally tubular constrictable sleeve or cuff for a limb of a person, a source for fluid pressure, a detector for providing measurements of slowly varying static pressures in said sleeve or cuff, means for measuring static pressure, and microphone means adapted for being arranged, in use, in proximity to an artery, e h a r a c t e r i s e d i n t h a t w h e r e i n t h e c u f f i s a t l e a s t p a r t l y e n c l o s e d i n t w o e s s e n t i a l l y c o n c a v e s h e l l p a r t s d i s p l a y i n g a s t i f f n e s s i n a n a x i a l d i r e c t i o n, a l o n g t h e l i m b, s a i d s h e l l p a r t s b e i n g o p e n a b l e a g a i n s t a r e s t o r i n g f o r c e, a n d i n t h a t w h e r e i n t h e m i c r o p h o n e m e a n s c o m p r i s e s a l i n e a r a r r a y o f m i c r o p h o n e e l e m e n t s [[is]] d i s p o s e d o n a j o i n t s u p p o r t w h i c h e m u l a t e s a u n i v e r s a l j o i n t t y p e s u p p o r t i n o n e s h e l l p a r t e s s e n t i a l l y p e r p e n d i c u l a r t o t h e l o n g i t u d i n a l a x i s o f s u c h s h e l l p a r t a n d n e a r t h e l o w e r e n d.

2. (Currently Amended) Apparatus according to claim 1, e h a r a c t e r i s e d i n t h a t w h e r e i n s i g n a l s e l e c t i o n m e a n s o f t h e d i v e r s i t y r e c e p t i o n t y p e a r e u s e d t o s e l e c t t h e m i c r o p h o n e t h a t p r o v i d e s t h e b e s t s i g n a l - t o - n o i s e r a t i o.

3. (Currently Amended) Apparatus according to claim 1, e h a r a c t e r i s e d i n t h a t w h e r e i n t h e m i c r o p h o n e s i g n a l i s a m p l i f i e d a n d m a d e a v a i l a b l e t o a e l e c t r o a c o u s t i c c o n v e r t e r f o r e n a b l i n g l i s t e n i n g t o t h e s i g n a l.

4. (Currently Amended) Apparatus according to claim 3, e h a r a c t e r i s e d i n t h a t w h e r e i n t h e s i g n a l i s o u t p u t v i a a b u i l t - i n s p e a k e r i n t h e a p p a r a t u s.

5. (Currently Amended) Apparatus according to claim 3, e h a r a c t e r i s e d i n t h a t w h e r e i n t h e s i g n a l i s o u t p u t v i a a w i r e l e s s l i n k t o a r e c e i v e r c o n n e c t e d t o e a r p i e c e s e a r r i e d b y a d a p t e d t o b e w o r n, i n u s e, b y a n a u s c u l t a t i n g p h y s i c i a n.

6. (Currently Amended) Apparatus according to claim 1, e h a r a c t e r i s e d i n t h a t i t c o m p r i s e s f u r t h e r c o m p r i s i n g s i g n a l p r o c e s s i n g m e a n s f o r c o m b i n i n g i n f o r m a t i o n

derived from measurements of slowly varying static pressures with information from said microphone means in order to obtain a numerical value for a blood pressure.

7. (Currently Amended) Apparatus according to claim 1, ~~characterised in that wherein~~ an inelastic strap attached to one shell part is provided to close [[the]] a gap between the shell parts.

8. (Currently Amended) Apparatus according to claim 7, ~~characterised in that wherein~~ the strap is provided with means locking to the other shell part in conjunction with the overlapping of said strap and said other shell part.

9. (Currently Amended) Apparatus according to claim 8, ~~characterised in that wherein~~ the amount of overlap between the strap and the shell part is used as a circumference measure for correcting the reading of blood pressure.

10. (Currently Amended) An apparatus according to claim 9, ~~characterised in that wherein~~ the overlap is measured capacitively between an electrode or a plurality of electrodes fixed to the cuff and an electrode or a plurality of electrodes fixed to the strap.

11. (Currently Amended) Apparatus according to claim 1, ~~characterised in that wherein~~ the shells are fitted on hinge parts connected to handle parts operable by one hand.

12. (Currently Amended) Apparatus according to claim 1, ~~characterised in that wherein~~, in addition to a stiffness in the longitudinal direction, the shell structure displays a resilience in the circumferential direction.

13. (Currently Amended) Apparatus according to claim 12, ~~characterised in that the further comprising a hinge that~~ is a continuous resilient part joining the shell parts.

14. (Currently Amended) Apparatus according to claim 11, 12, ~~characterised in that wherein~~ the shell parts are integral with the hinge parts, forming one continuous sheet of material.

15. (Currently Amended) Apparatus according to claim 14, ~~characterised in that wherein~~ the continuous sheet of material assumes a generally frusto-conical shape in its closed state.

16. (Currently Amended) Apparatus according to claim 11, ~~characterised in that wherein~~ mechanical actuating means fitted in proximity to the hinge parts compress one shell part towards the other during measurement.

17. (Currently Amended) Apparatus according to claim 16, ~~characterised in that wherein~~ the mechanical actuating means ~~consist of~~ comprises an air cylinder and levers.

18. (Currently Amended) Apparatus according to claim 16, ~~characterised in that wherein~~ the mechanical actuating means ~~consist of~~ comprises strings fitted near the inner side of each shell part and disposed perpendicular to the longitudinal axis of such shell part.

19. (Currently Amended) Apparatus according to claim 1, ~~characterised in that wherein the constrictable sleeve or an inflatable~~ cuff forms an inner lining to the shell parts, providing an inflatable main air chamber.

20. (Currently Amended) Apparatus according to claim 7, ~~characterised in that an inflatable~~ wherein the constrictable sleeve or cuff forms an inner lining to the shell parts, providing an inflatable main air chamber, [[that]] and wherein the strap is provided with air chambers disposed essentially perpendicular to the orientation of the shells and communicating with the main air chamber.

21. (Currently Application) Apparatus according to claim 1, ~~characterised in that the wherein joint support emulates a universal joint is emulated by means of~~ a foam pad.

22. (Currently Application) Apparatus according to claim 1, ~~characterised in that the wherein joint support emulates a universal joint is emulated by means of~~ a separate air chamber fitted between the cuff and the microphone array.

23. (Cancelled).

24. (Cancelled).

25. (Previously Presented) Apparatus according to claim 1, wherein said sleeve or cuff is adapted to fit an arm of a person.

26. (Previously Presented) Apparatus according to claim 1, wherein said sleeve or cuff is adapted to fit an leg of a person.